APPENDIX A: ISSUES, QUESTIONS AND CONCERNS FROM PUBLIC MEETINGS

At each of the public meetings (Table 1), representatives from the Division of Entomology and Plant Pathology presented the proposed Gypsy Moth project, and answered and received questions and comments. The presentation explained:

- the life cycle, feeding habits and hosts of Gypsy Moth,
- the identification of Gypsy Moth,
- survey methods,
- Gypsy Moth impacts and damage to the trees and forest,
- selection of proposed sites,
- selection of the treatment options,
- the timing and application of treatments,
- boundaries of the treatment sites with maps and photos,
- and the public comment time period and decision process.

Both during and following the presentation, questions and comments were taken, answered and discussed with the people attending the meetings. A representative from Purdue University also attended some of the meetings and assisted in answering and discussing questions and comments from the people attending the meetings.

The questions and comments received at the public meetings concerned four main issues:

- Human and animal health and safety;
- Nontarget effects and environmental effects;
- Economic and political impacts;
- Likelihood of success of the proposed project, past projects and the treatment options proposed.

ISSUES

Human health and safety

The questions and comments received at the public meetings regarding human health and safety were in three areas:

- The use and risks of Btk and pheromone flakes
- The decision and notification process for the implementation of the project
- The time of application of Btk and pheromone flakes
- The security measures taken during the project

Btk questions were asked concerning the risk to adults and children; why the Btk label states it cannot be applied over water; when people can go outside again after a treatment; if there is any kind of irritation caused by the product; if swimming pools should be covered; how to get additional product information and what kind of security measures

are taken and concern over the low altitude of the planes. The responses explained that no hazards-either immediate or cumulative, have been identified for the general public when exposed to Btk; that Btk naturally occurs in the soil; that treatments are not conducted when school buses or children are outside in the site; that Btk is applied to foliage, it breaks down in the environment in a few days; that Btk dries in about 30 minutes and we recommend people wait that amount of time before going outside; swimming pools do not need to be covered; and that we check annually during treatment planning for updates to product labels. A MSDS sheet would be sent to those who have requested it. Security and safeguarding measures are taken from the time the product material is received through the time that the product is applied. All plane altitudes during application are approved prior by the FAA.

Pheromone flake questions were asked concerning the risk to adults and children and when people can go outside after a treatment. It was responded that no hazards, either immediate or cumulative, have been identified for the general public when exposed to pheromone flakes; that flakes should settle on trees or the ground by about 30 minutes.

Questions that were asked regarding the decision and notification process for proposed treatments were: would the public be notified of the when the treatments will occur and would updates be posted on the website. The responses explained that residents will be notified by mail approximately two weeks prior to the treatment; that residents would be notified through local media (radio, television, newspaper) a couple days prior to the treatment and that updates will be posted to our website.

Questions were asked regarding the time of the application and the response was that the timing of the treatments was dependent upon weather conditions and that treatments are generally started in the early morning hours (first light). Btk treatments are applied during May and pheromone flake treatments are applied during June. Most sites treated with Btk will receive two applications, with the second application being 4-10 days after the first application.

Non target effects and environmental effects

Questions were asked if Btk affects animals, birds, other insects, Japanese beetles or ground water. It was also asked if gypsy moths would lay eggs on pets. It was responded that Btk does not negatively affect animals, birds, other insects or Japanese beetles. Btk naturally exists in soils and does not affect ground water. Gypsy moths do not lay eggs on pets. It was also asked if Btk affects other butterflies or moths. Responses stated that Btk can affect other butterfly and moth caterpillars; however Btk will be applied at a time of year when the majority of caterpillars have not hatched yet. Btk only affects the larval or caterpillar stage.

The question was asked if the pheromone flakes were harmful to dogs that might eat them. It was stated that they were extremely small (1x3 mm) and that the glue on the flakes was a food grade glue.

The questions were asked how winds could affect treatments. It was responded that winds could delay treatments, as we what to avoid any drift problems of the products and want to make sure the products are applied to the intended site.

Economic and political impacts

A question was asked whether or not if sterile males would be released for control. This option is not currently available and is a very expensive treatment option. What is the cost of one Btk application? Approximately $17.45/acre/application. The question was asked why the government allowed this pest to be brought into the United States. This pest was introduced into the U.S. in the mid 1800's for intention of using it for silk production. At that time, little was known about the risks of introducing exotic pests and screening processes were not as extensive as today.

A few attendees of the meetings specifically expressed their appreciation for the treatment and stated they were in favor of the project.

Likelihood of success of the proposed project and the treatment options proposed

Questions were asked how we would know if the treatment was effective and if we would need to treat again in two years. The site will be monitored with traps this year and next year. The 2009 traps set will give us a very good indication as to whether or not the population has been controlled. We do not know at this point if sites will need to be treated next year or the year after, that decision will be based on future trap catches and any finds of egg masses.

Other questions and concerns

Questions were asked about: trapping and survey methods; who they could contact to come look at their trees; general biology questions about gypsy moth; what control options were available to homeowners and what other controls are being explored; what natural predators/pathogens were present in Indiana; how to look for egg masses; how soon defoliation might occur; what plant species gypsy moth prefers; how low the planes fly; how proposed treatment sites are determined and a number of questions regarding other insect pest issues and their control.

The response for trapping and survey methods explained how traps are set based on a grid system and how moth counts are used to locate increasing populations and then the moth counts are then used to try and locate egg masses. The quantity and location of moths and egg masses and locations of habitat determine whether an area is proposed for treatment or not and what the boundaries of the proposed site are.

The response for whom to contact to investigate possible gypsy moth finds on properties stated that the IDNR would send a local employee out to examine trees.

Several general questions on biology were responded to, by restating information from the presentation slides and by explaining the difference between gypsy moth and other common caterpillars.

Control and survey options for homeowners were explained such as: burlap banding, soybean oil sprays and insecticide sprays. It was stated that egg masses can be found anywhere on a tree or on any outdoor article, house or vehicle. Gypsy moth defoliation may not occur for several years in an infested area.

It was responded that Indiana does have some natural animal and bird predators and also a pathogen that will kill gypsy moth. New potential predators and parasites are currently being explored.

The responses of preferred gypsy moth hosts included many urban landscape tree and shrub species, with over 500 known species as hosts.

It was responded that the treatment planes fly low, just over the tree tops. Usually 50-100 feet above the tree tops, but sometimes higher depending on the site.

Lastly, a number of other responses were given in answer to questions on many other insect species, based on the information given at the meeting.

Table 1: Date, time and attendance of public meetings for the proposed treatment sites by county.

COUNTY	SITE	DATE	TIME	# Attending
Allen	Waterswolde Arlington Park Maplecrest 08 Memorial Park St. Joe 08 Woodbine Wappes Road	January 30, 2008	2:00 PM 7:00 PM	53
Elkhart	Goshen County Road 30	January 29, 2008	3:00 PM 6:00 PM	10
Lake	Oak Ridge	February 5, 2008	6:00 PM	22
LaPorte	Springville 08 Beatty Corner Lofgren	January 31, 2008	3:00 PM 6:00 PM	5
St. Joseph	Quince Road	January 24, 2008	6:00 PM	7
Total in attendance for all meetings				97